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| 09/931,922 | 08/20/2001 | Yoshinori Takasaki | 01USFP673 | 4337 |

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| EXAMINER |
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GREY, CHRISTOPHER P

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| ART UNIT | PAPER NUMBER |
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2616

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09/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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| Office Action Summary | Application No. 09/931,922 | Applicant(s) TAKASAKI, YOSHINORI | |
| | Examiner Christopher P. Grey | Art Unit 2616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 3-7, 9-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Nagata et al. (US 6269083), hereinafter referred to as Nagata.

Claim 1, 7, 12, 13 Nagata discloses a plurality of OAM cell handlers (OAM cell controller, see fig 5, 37)

Nagata discloses a plurality of virtual path handlers (fig 2, 12 and Col 8 lines 1-17, plurality of paths).

Nagata discloses a plurality of virtual channel handlers (fig 2, 13 and Col 8 lines 1-17, plurality of paths).

Nagata discloses trunks (Col 6 lines 36-46)

Nagata discloses a control unit (fig 5, 36, controller) configured to:

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Issue an OAM cell send instruction to a first one of the plurality of OAM cell handlers to carry out a loopback control test (Col 12 lines 35-52) to at least one of the virtual path handlers (fig 2, SN=0), at least one of said virtual channel handlers (fig 2, SN=1), and at least one of said trunks (fig 2, SN=2), which are associated with said first OAM cell handler, in response to the OAM cell send instruction, and

When said first OAM cell handler send out an OAM cell in response to said OAM cell send instruction, determine a fault position based on returning or non-returning (Col 13 lines 46-65) of the OAM cell to said first OAM cell handler (Col 16 line 55-Col 17 line 4).

Claim 3, 9, 10, 20 Nagata discloses said OAM handlers, said plurality of virtual path handlers, said plurality of virtual channel handlers, said trunks, and said control unit being contained in an ATM switching apparatus (see fig 5, 31 and 34, exchange block is connected to switch, where switch is dedicated for routing based on routing information, and routing information comes from ATM exchange block, where exchange block would be considered a form of switching apparatus).

Claim 4, 11, 14 Nagata discloses periodically issuing the OAM cell send instruction to the first OAM cell handler (Col 14 lines 3-24).

Claim 5 Nagata discloses determine a fault position based on returning or non-returning (Col 13 lines 46-65) of each OAM cell to said first OAM cell handler (Col 16 line 55-Col 17 line 4).

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Claim 6 Nagata discloses an OAM cell transmission control unit that transmits (issues) an OAM cell transmission request (OAM send cell instruction) as disclosed in Col 12 lines 35-52.

Nagata also discloses an OAM cell transmission control unit that controls the OAM cell transmitter to transmit the OAM loopback cell to the path route (Col 6 lines 39-46).

Nagata discloses a controller coupled to the control unit for determining a fault based on the returning of the OAM cell (Col 16 line 62- Col 17 line 20).

Nagata discloses a second OAM loopback cell delivering means (OAM cell handler) being enabled (changed) to deliver a second OAM loopback cell (Col 5 lines 44-50), where transmission of a second cell may be broadly interpreted as a change for the control unit, as opposed to sending a first OAM cell.

Claim 15 Nagata discloses forwarding information to the control unit based on return of the test data to the first testing device (fig 6, 37 and 37b).

Claim 16 Nagata discloses a controller coupled to the control unit for determining a fault based on the returning of the OAM cell (Col 16 line 62- Col 17 line 20).

Claim 17 Nagata discloses performing a fault avoidance operation based on the identified fault (Col 25 lines 9-19, maintenance action).

Claim 18 Nagata discloses the control unit being configured to forward loopback control test initiation instructions to the plurality of the testing devices (Col 12 lines 35-52).

Claim 19 Nagata discloses the plurality of testing devices may be included in the plurality of path handlers, the plurality of channel handlers or the plurality of trunks (see fig 2, exchanges B-D).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 2, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al. (US 6269083), hereinafter referred to as Nagata.

Claim 2, 8 Nagata discloses a switching apparatus connected to an ATM exchange dedicated to route/switch data based on routing information (see fig 5 and relevant description).

Nagata also discloses detecting the position of a fault (Col 16 line 55-Col 17 line 4).

Nagata does not specifically disclose carrying out a switching operation of a route from at least one of said virtual path handlers to at least one of said trunks for fault avoidance based on the determined fault position.

It would have been obvious to one of the ordinary skill in the art at the time of the invention that as a result of the determination that a fault has occurred and the position of the fault, that a switching operation take place in order to switch from the determined

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fault position, as is well known and applicable within the art. Furthermore, Nagata discloses recognizing a fault and a making a maintenance action with ease, where a maintenance action may simply involve switching a route.

Response to Arguments

4. Applicant's arguments filed on December 29, 2006 have been fully considered but they are not persuasive.

(a) The applicant argued that the cited art does not disclose the applicants plurality of path handlers, plurality of virtual channel handlers and a plurality of trunks.

The examiner maintains that the claimed subject matter is addressed within the rejection of claim 1, wherein Nagata discloses an exchange which allows for the inspection of paths (Col 8 lines 9-13). The exchange 12 is equivalent to a virtual path handler due to the fact that the term is interpreted in its broadest sense, where the exchange handles path information which is interpreted as path handling. Furthermore, Nagata discloses the exchanges dealing with information involving virtual paths and virtual channels (Col 2 lines 60-63), where virtual channel handlers and virtual path handlers are broadly interpreted as devices handling virtual path information and/or virtual channel information (Col 14, lines 16-24).

Furthermore, a trunk by definition is a communication line between two switching systems, where any of the lines connecting the exchanges as shown in fig 2 is equivalent to a trunk.

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(b) Further arguments made by the applicant rely on the argument that VPH's, VCH's and trunks are not disclosed by Nagata. The examiner clarifies how the exchanges and lines between them are equivalent to VPH's VCH's and trunks, and urges the applicant to reconsider further arguments as they are addressed within the rejection of claim 1, where Nagata discloses an OAM cell send instruction and loop back control testing.

(c) Applicant argues that the units are not contained in an ATM switching apparatus. The examiner maintains that since the units are directly connected to a switching unit where switch is dedicated for routing based on routing information, and routing information comes from ATM exchange block, where exchange block would be considered a form of switching apparatus.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

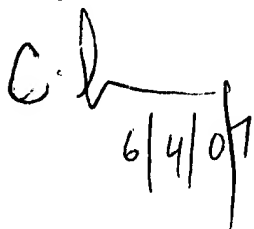
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

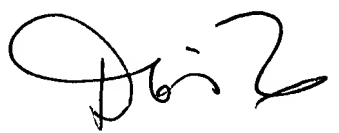
6.. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Grey whose telephone number is (571)272-3160. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571)272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher Grey
Examiner
Art Unit 2616


6/4/07


DORIS H. TO
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